

Title (en)

ALLOY, IN PARTICULAR A SOLDER ALLOY, METHOD FOR JOINING WORKPIECES BY SOLDERING USING THE SOLDER ALLOY AND USE OF THE ALLOY FOR SOLDERING

Title (de)

LEGIERUNG, INSBESONDERE LOTLEGIERUNG, VERFAHREN ZUM VERBINDEN VON WERKSTÜCKEN DURCH LÖTEN MITTELS EINER LOTLEGIERUNG SOWIE VERWENDUNG EINER LEGIERUNG ZUM LÖTEN

Title (fr)

ALLIAGE, NOTAMMENT ALLIAGE DE BRASAGE, PROCEDE PERMETTANT D'ASSEMBLER DES PIECES PAR BRASAGE A L'AIDE D'UN ALLIAGE DE BRASAGE ET UTILISATION D'UN ALLIAGE POUR EFFECTUER DES OPERATIONS DE BRASAGE

Publication

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Application

EP 96925719 A 19960711

Priority

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Abstract (en)

[origin: DE19526822A1] The invention, which enables wider use to be made of soft-soldering techniques, concerns an alloy, in particular a solder alloy, a method of joining workpieces by soldering using the solder alloy and the use of the alloy for soldering. The alloy proposed is characterized in that it contains at least 1 % by wt. of an element or a mixture of elements from sub-group IVa and/or Va in the periodic table, at least 0.01 % by wt. of an element or a mixture of elements from the lanthanide series; optionally at least 0.5 % of silver or copper or indium or a mixture silver and/or copper and/or indium; and optionally at least 0.01 % by wt. of gallium, the remainder consisting of tin or lead or a mixture of tin and lead plus, as applicable, the usual impurities. The alloy proposed can be used as solder in oxygen-containing atmospheres such as air, can be used at relatively low temperatures and efficiently wets normally difficult to wet surfaces such as ceramic surfaces. In a further embodiment of the invention, the solder alloy can be used without flux.

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